This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) Use of at least one of the substrates selected from the group consisting of FDP, DDAO, DiFMUP, ELF®39 phosphate and ELF®97 phosphate for the detection, characterization and qualitative and/or quantitative determination of the activity of a phosphoamidase.

2. (Original) The use of claim 1 wherein the phosphoamidase is a protein phospho-amidase.

3. (Original) The use of claim 2 wherein the protein phosphoamidase is a protein histidine phosphoamidase.

4. (Original) The use of claim 3 wherein the protein histidine phosphoamidase is PHP1.

5. (Original) A method for the identification of an inhibitor or activator of a phosphoamidase comprising the steps:

a) establishing a sample comprising a phosphoamidase and a test substance,
b) administering a substrate selected from the group consisting of FDP, DDAO, DiFMUP, ELF®39 phosphate and ELF®97 phosphate to the sample,
c) detecting the signal produced by the substrate, and
d) identifying the test substance as an activator or inhibitor of the phosphoamidase by comparing the signal produced in the sample comprising the test substance with the signal produced in a control sample comprising no test substance.

6. (Original) A method for the identification of the activity of a phosphoamidase in a electrophoresis gel or on a blot membrane comprising the steps:

a) separating a sample comprising a phosphoamidase in a gel
b) if necessary, renaturation of the phosphoamidase

c) incubating the gel or the blot membrane resulting from blotting the gel with ELF®39 phosphate and/or ELF®97 phosphate as substrate, and
d) detecting the signal produced by the substrate

7. (Original) A method for the determination of the specifity of an inhibitor or activator for a certain phosphoamidase or phosphatase comprising the steps:
a) separating a sample comprising several phosphoamidases and/or phosphatases in a gel
b) if necessary, renaturation of the phosphoamidase
c) incubating the gel or the blot membrane resulting from blotting the gel with the inhibitor or activator and subsequently with ELF®39 phosphate and/or ELF®97 phosphate as substrate, and
d) determining the specificity of the inhibitor or activator by comparing the signal produced in the gel or blot membrane incubated with the inhibitor or activator with the signal produced in a control gel or blot mambrane not incubated with the inhibitor or activator.

8. (Currently Amended) A method according to claim 5 ~~any of the claims 5 to 7~~ wherein the phosphoamidase is a protein phosphoamidase.

9. (Original) A method according to claim 8 wherein the protein phosphoamidase is a protein histidine phosphoamidase.

10. (Original) A method according to claim 9 wherein the protein histidine phosphoamidase is PHP1.